

02.3db D2.1 100G, 200G, 400G Short Reach Fiber Task Force 1st Working Group recirculation ballot con

Cl 167 SC 167.7.1 P49 L27 # 6

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type TR Comment Status R

It was shown that TDECQ with MMSE is accurate and reduce test time and associated test cost.

https://www.ieee802.org/3/db/public/September-09-September-29-2021/ghiasi_802.3db_01_092321.pdf

SuggestedRemedy

MMSE is representative of real receiver and a full grid search may produce results slightly better, as shown by in Ghiasi contribution there is excellent correlation for scope measurements. MMSE will reduce test time specillay given 802.3db reference receiver is 9 taps will longer to do full grid search and will increase test cost. Full grid search may produce as much as 0.2 dB of lower TDECQ than real receiver and pushing real TDECQ>4.5 dB is risky. Task force need to make a decision either stay with sull grid search and reduce TDECQ to 4.3 dB or stay with current 4.4 dB with MMSE.

Response Response Status U

REJECT.

Based on straw poll, decision is to make no change to the draft.

Straw poll (Chicago rules):

- a) Make no change to the draft
- b) Adopt MMSE search method with maximum TDECQ of 4.4 dB
- c) Maintain current TDECQ methodology, but reduce maximum TDECQ to 4.3 dB

Vote: a) 15/37, b) 7/37, c) 11/37

No answer 14/37

Straw poll (Decisional):

- A) Reject: make no change to the draft.
- B) Accept in principle: Maintain current TDECQ methodology, but reduce maximum TDECQ to 4.3 dB.

Vote: A) 15/35, B) 8/35

No answer 12/35

Cl 167 SC 167.8.1 P53 L20 # 1

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type TR Comment Status R

There is no definition of valid 100GBASE-ZV1/SR1, etc., instead you should reference the PCS signal

SuggestedRemedy

Please replace PMD signals with PCS signals, 100GBASE-R with CL91 RS-FEC, 200GBASE-R, or 400GBASE-R signals

Response Response Status U

REJECT.

Multimode clauses 86, 95, 138, and 150 have defined "valid <PMD name> signal" as a test pattern. To keep consistency with past multimode clauses, no change will be made to Table 167-11.

Cl 167 SC 167.8.14.1 P57 L57 # 3

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type TR Comment Status R

db draft reference CL 121.8.9 for stress receiver sensitivity and this clause include sinusoidal jitter mask, if we are referencing CL121 why duplicate jitter mask in the db CL 167?

SuggestedRemedy

Remove CL 167.8.14.1

Response Response Status U

REJECT.

Past multimode clauses 95, 138 and 150 have carried the description of the sinusoidal jitter for testing receiver jitter tolerance.

There is no other clause with a description of 100G per lane sinusoidal jitter mask.